

## Collection and documentation of *Iphiona grantioides* from Gujarat and note on its distribution

The knowledge about recent distribution is indispensable for taxonomist interested in the species. *Iphiona grantioides* (Boiss.) Anderb. (Asteraceae) has scanty and old information about its distribution in India. *Iphiona* genus has only one species in India (Shekhar et al. 2013). The genus *Iphiona* Cass. was previously known as *Inula* L.; however, some of the species belonging to this genus were reclassified in the genus *Iphiona* (Anderberg 1991; Shekhar et al. 2013).

The lectotype of this plant is available with Royal Botanical Garden, Kew. The specimens deposited at Royal Botanical Garden were collected by F. Stoliczka (lectotype: K!barcode no. K000978629) from Kachchh in the year 1985. As per the present distribution record, this species is distributed in India, Iran, Oman, and Pakistan (POWO 2020). In India, Hooker (1882)



A—Habit | B—Flowering twig | C—Herbarium voucher specimen.

recorded this species from Kachchh, Raghavan et al. (1981) enlisted the species in checklist of plants of Gujarat, and Hajra et al. (1995) reported this species from Gujarat without giving specific locality and collection number. Later, state-level research was carried out by Pilo et al. (1996) in which, the specimen was collected from Kachchh and deposited in BARO herbarium, Maharaja Sayajirao University of Baroda, Gujarat. Its occurrence was recorded

by Jani (2014) based on Raghavan et al. (1981) and Pilo et al. (1996) report. There are some earlier botanical studies carried out by Shah (1978), Rao (1981), Sabnis & Rao (1983), and Bhatt (1993) in Kachchh district, but none had recorded occurrence of *Iphiona grantioides* (Boiss.) Anderb. from Kachchh district. In recent studies such as Pandey et al. (2009), Patel et al. (2011, 2019) did not record this species in Kachchh region. However, during a floristic exploration

in the Canal Command Area in Patan district of Gujarat in the year of 2020, we collected specimens of *Iphiona grantioides* (Boiss.) Anderb. from the Patanka village, of Patan district (23.867 N, 71.272 E) and Mardak Bet, Little Rann of Kachchh (23.387 N, 71.086 E) other than the type locality provided at herbarium of Kew Botanical Garden. In Patan district, the height of plant was up to 70 cm whereas in Kachchh district height was up to 15 cm. So, the taxonomic efforts were made for documentation and to know its distribution in the Gujarat state. Due to its morphological variations there was confusion in identity of the species. The authentic identification of the species was confirmed by the Botanical Survey of India (BSI), Jodhpur, Rajasthan (Letter No: BSI/AZRC/I.1201/Tech./2020-21 (Pl. Id.)/22 dated on 03.vi.2020). The voucher specimen is deposited in BSI, Jodhpur, Rajasthan for reference purposes.

### Morphological description

Perennial, herb, soft aerial parts and woody base, stems 15–70 cm high, glandular and hairy, branches very stout short, leaves linear to spoon-shaped, leaves fleshy lower long-petioled cuneate 3-fid, upper linear entire or 3-toothed and balsamic odour, flower heads yellow 1 inch diameter, solitary, radiate, involucre bract pubescent and viscid, outer short green obtuse, inner narrower long acute, achenes large strongly ribbed hispid above constricted below the tip, ray florets are 5–13, 9–20 × 2.5 mm. Disc florets are 40–90; flower 6–11 × 1.5–2mm, style about 7–8 mm long.

**Phenology:** November–December

**Locality:** Patanka village of Patan district, Gujarat (23.867 N, 71.272 E) and Mardak Bet, Little Rann of Kachchh, Gujarat (23.387°N, 71.086°E) from where the specimen was noted.

**Present status or ecological note:** Based on the current study and available literatures, *Iphiona grantioides* is found occasionally in arid and semi-arid areas of Gujarat state. During the study, the species was found with only few individuals at two sites as mentioned above. It prefers stony ground, dry river beds and dry areas to grow vigorously.

**Specimen examined:** 0052 (GEER) 19.viii.2019, Patanka village of Patan district, Gujarat, 23.8672 N, 71.2725 E, coll. R. Yadav & A. Suthar. The specimen is confirmed by the Botanical Survey of India (BSI), Jodhpur, Rajasthan (Letter No: BSI/AZRC/I.1201/Tech./2020-21 (Pl. Id.)/22 dated on 03.vi.2020).

**Basionym:** *Inula grantioides* (Boiss.) Anderb., Nordic J. Bot. 5(2): 184 (1985)

**Synonyms:** *Helenium grantioides* (Boiss.) Kuntze, Revis. Gen. Pl.1:343 (1891), *Inula cutchica* C.B Clarke., Compos. Ind.: 126 (1876) *Callistephus cuneatus* Dalzell ex Cook, Fl. Bombay 2:31(1904)

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